Claims:

1. Multilayered product comprising
   - at least one first layer, which is formed by cellulosic or lignocellulosic fibres, and
   - at least one second layer, which is fitted adjacent to the first layer or at a distance therefrom,

characterized in that

   - the second layer contains a synthetic, electrically conductive polymer, which is mixed with a binder which forms a binder matrix,

whereby the second layer is at least partially electrically conductive.

2. The multilayered product according to claim 1, characterized in that the binder forms a homogeneous mixture together with the electrically conductive polymer.

3. The multilayered product according to claim 1, characterized in that the binder of the second layer comprises a binder that dissolves or disperses in water.

4. The multilayered product according to claim 3, characterized in that the binder comprises dextrin, carboxymethyl cellulose, polyvinyl alcohol, polyvinyl acetate or a binder based on starch or a starch derivative.

5. The multilayered product according to any of the preceding claims, characterized in that it comprises two first layers which have been bonded together by a second layer fitted inbetween them.

6. The multilayered product according to claim 5, characterized in that the first layers are formed by fibrous webs.

7. The multilayered product according to claim 6, characterized in that the fibrous webs are formed by unsymmetrical paper or cardboard webs.

8. The multilayered produced according to any of the preceding claims,

characterized in that it further comprises a third layer which is arranged on top of the first or the second layer.

9. The multilayered product according to claim 8, characterized in that the third layer is formed by a plastic film, which has been extruded on the surface of the product.

10. The multilayered product according to claims 8, characterized in that the third layer is formed by a layer of a coating colour.

11. The multilayered product according to any of the preceding claims, characterized in that the second layer contains an electrically conductive polymer selected from the group of polyaniline, polypyrrol and polythiophene.

12. The multilayered product according to any of the preceding claims, characterized in that concentration of the electrically conductive polymer in the second layer is about 0.1 to 10 weight-%.

13. The multilayered product according to claim 12, characterized in that surface resistivity of the second layer is about 10exp2 to 10exp11 Ohm.

14. The multilayered product according to any of the preceding claims, characterized in that the electrical conductivity of the electrically conductive polymer of the second layer is locally adjusted to form a pattern of electrical conductivity or electrical non-conductivity, respectively.

15. The multilayered product according to any of the preceding claims, characterized in that the surface of the multilayered product is provided with a visual marking which indicates the layer containing the electrically conductive polymer.

16. Method for producing a multilayered product, which method comprises producing

- at least one fibrous layer, which is formed by cellulosic or lignocellulosic fibres, and
- at least one layer of an adhesive agent arranged on top of the fibrous layer,

characterized in that

- layer of the adhesive agent is formed from a mixture, which contains synthetic, electrically conductive polymer, which is mixed with a binder, and
- this mixture is applied upon the fibrous layer.

17. The method according to claim 16, c h a r a c t e r i z e d in that binder mixture is applied as an at least partially continuous layer on top of the fibrous layer and is allowed to attach thereto.

18. The method according to claim 16 or 17, c h a r a c t e r i z e d in that the binder is used for attaching two fibrous layers to each other.

19. The method according to any of claims 14 to 18, c h a r a c t e r i z e d in that the electrically conductive polymer is mixed in the form of a dispersion into the binder.

20. The method according to any of claims 14 to 19, c h a r a c t e r i z e d by producing a binder mixture in which the concentration of the electrically conductive polymer is about 0.1 to 10 % of the weight of the mixture.

21. The method according to any of claims 14 to 20, c h a r a c t e r i z e d in that the binder is water-soluble or water-dispersable, and it comprises, e.g., dextrin, carboxymethyl cellulose, polyvinyl alcohol, polyvinyl acetate or a binder based on starch or a starch derivative.

22. The method according to any of claims 14 to 21, c h a r a c t e r i z e d in that the electrically conductive polymer is used in doped form.

23. The method according to claim 22, c h a r a c t e r i z e d in that the electrically conductive polymer is mixed with the binder at acid pH, preferably at a pH of 1 to 6.5.

24. The method according to any of claims 14 to 23, c h a r a c t e r i z e d in that the surface resistivity of the binder layer formed can be adjusted to a value in the range of 10exp2 to 10exp11.

25. The method according to any of claims 14 to 24, c h a r a c t e r i z e d in that

the binder mixture is applied on a fibrous web having a pH of 8 at the most.

26. The method according to any of claims 14 to 25, c h a r a c t e r i z e d in that the electrical conductivity of the polymer is changed by doping the electrically conductive polymer or by dedoping the electrically conductive polymer, respectively.

27. The method according to claim 26, c h a r a c t e r i z e d in that the electrically non-conductive polymer is doped by treating the polymer layer with an acid solution, which is used for painting a desired pattern on the surface of the paper or cardboard product.

28. The method according to claim 26, c h a r a c t e r i z e d in that the electrically conductive polymer is dedoped by treating the polymer layer with an alkaline solution, which is used for painting a desired pattern on the surface of the paper or cardboard product.

29. The method according to any of claims 26 to 28, c h a r a c t e r i z e d in that electrically conductive polymer is doped by printing a desired pattern on the surface of the paper or cardboard product by using a printing colour which is capable of doping or dedoping the electrically conductive polymer.

30. The method according to any of claims 14 to 29, c h a r a c t e r i z e d in that a pattern is printed on the surface of the paper or cardboard product for indicating how the electrical condutivity of the second layer can be detected.

31. The method according to any of claims 14 to 30, c h a r a c t e r i z e d in that a third layer is fitted upon the first or the second layer.

32. The method according to claim 31, c h a r a c t e r i z e d in that the third layer is formed by a plastic film, which is extruded on top of the product.

33. The method according to claim 31, c h a r a c t e r i z e d in that the third layer is formed by a layer of a coating colour.